CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/NE/W.No.08/WMM/Gradation/2016-17 28.03.2017

TEST REPORT ON GRADATION OF WET MIX MACADAM

* Customer	:	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
* Agency	:	**M/s. Nithin Enterprises,** Bangalore.
* Name of Work	:	Patching Pot holes in main and cross roads of Kodigehalli Tatanagara Bhadrappa Layout, Devinagara, Lottegollahalli, Muneshwaranagara and surroundings areas in Ward No.08, BBMP, Bangalore.
* Reference	:	BBMP/EE/BTP/WO/239/2016-17 Dated: 17.03.2017
Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS 2386 (part-1)1963 (RA-2011)
Date of Testing	:	28.03.2017

Oven Dry Wt (gm): **5000**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits As per Morth Table 400-13
53	0	0	0	100	100
45	105	105	2.1	97.9	95-100
22.4	1640	1745	34.90	65.10	60-80
11.2	1175	2920	58.40	41.60	40-60
4.75	580	3500	70.00	30.00	25-40
2.36	425	3925	78.50	21.50	15-30
0.600	415	4340	86.80	13.20	8-22
0.075	380	4720	94.40	5.60	0-8

*Information is furnished by the Customer/Representative.

Asst. Executive Engineer, BTP Sub Division, Yelahanka Zone, B.B.M.P., Bangalore.

Civil-Tech Consultants & Engineers Bangalore

Note:

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⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

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Job No.: CTCE/BBMP/NE/W.No.08/WMM/AIV/2016-17 28.03.2017

TEST REPORT ON IMPACT VALUE OF AGGREGATE

* Customer	:	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
* Agency	:	**M/s. Nithin Enterprises,** Bangalore.
* Name of Work	:	Patching Pot holes in main and cross roads of Kodigehalli Tatanagara Bhadrappa Layout, Devinagara, Lottegollahalli, Muneshwaranagara and surroundings areas in Ward No.08, BBMP, Bangalore.
* Reference	:	BBMP/EE/BTP/WO/239/2016-17 Dated: 17.03.2017
* Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS : 2386(Part -4)-1963 (RA-2011)
Date of Testing	:	28.03.2017

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	87	85	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	298	304	
4	Aggregate Impact value = percent fines 100* (W2/W1)%	22.60	21.85	22.22

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Wet Mix Macadam is 30%

Note:

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Assistant Executive Engineer,
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Yelahanka Zone, B.B.M.P.,
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Job No.: CTCE/BBMP/NE/W.No.08/WMM/Shape.T/2016-17 28.03.2017

TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
* Agency	:	**M/s. Nithin Enterprises,** Bangalore.
* Name of Work	:	Patching Pot holes in main and cross roads of Kodigehalli Tatanagara Bhadrappa Layout, Devinagara, Lottegollahalli, Muneshwaranagara and surroundings areas in Ward No.08, BBMP, Bangalore.
* Reference	:	BBMP/EE/BTP/WO/239/2016-17 Dated: 17.03.2017
* Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS 2386(Part 1) 1963 (RA 2011)
Date of Testing	:	28.03.2017

Sl.No.	Description	Result
1	Flakiness Index	12.85%
2	Elongation Index	13.47%
3	Combined Flakiness & Elongation Index	26.32%

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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Job No: CTCE/BBMP/NE/W.No.08/BC/Bitumen/2017-18 01.04.2017

BITUMEN CONTENT AND GRADATION DETERMINATION OF BITUMINOUS CONCRETE

As per IS2386 and IRC:SP:11-1984

* Customer	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
* Agency	**M/s. Nithin Enterprises,** Bangalore.
* Name of Work	Patching Pot holes in main and cross roads of Kodigehalli Tatanagara Bhadrappa Layout, Devinagara, Lottegollahalli, Muneshwaranagara and surroundings areas in Ward No.08, BBMP, Bangalore.
* Reference	BBMP/EE/BTP/WO/239/2016-17 Dated: 17.03.2017
SAMPLE I/D	Roads in Ward No.08
DATE OF TESTING	01.04.2017

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Sample 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	470	469
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g	-	-
6. Weight of Bitumen Extracted, g. (corrected)	30	31
7. Bitumen content in %	6.00	6.20
8. Average	**6.10**	

GRADATION AFTER EXTRACTION

TABLE - 1

SIEVE SIZE	Percent Passing, %		JOBMIX
mm	Sample 1	Sample 2	Gradation
19	100.00	100.00	100
13.2	87.52	86.53	79-100
9.5	82.69	77.42	70-88
4.75	64.57	68.12	53-71
2.36	48.12	48.63	42-58
1.18	41.23	66.48	34-48
0.6	33.58	32.15	26-38
0.3	27.42	23.25	18-28
0.15	12.48	15.47	12-20
0.075	5.28	6.58	4-10

*Information is furnished by the Customer/Representative.

Assistant Executive Engineer, Kodigehalli Sub Division, Yelahanka Zone, B.B.M.P., Bangalore.

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